

**We claim:**

1. A system for curing curable material, the system comprising:
  - 5 (a) an inlet port adapted to receive radiation from a source;
  - (b) a plurality of emitter ports;
  - (c) transmission means operatively coupling the inlet port to each emitter port;
  - 10 (d) wherein the transmission means is adapted to conduct radiation from the inlet port to the emitter ports.
2. The system as claimed in claim 1, wherein the inlet port is adapted to receive the emitting end of a light guide.
3. The system as claimed in claim 1, wherein the inlet port is adapted to releasably engage a metal ferrule of a light guide.
- 15 4. The system as claimed in claim 1, wherein the emitter ports are configured substantially in a circle.
5. The system as claimed in claim 4, wherein each emitter port is configured to emit radiation substantially radially.
6. The system as claimed in claim 1 further comprising a housing, and  
20 wherein the housing defines a substantially tubular irradiation chamber having an interior wall.
7. The system as claimed in claim 6, wherein the emitter ports are positioned on the interior wall of the irradiation chamber.
8. The system as claimed in claim 7, wherein the emitter ports are  
25 configured to provide irradiation in a substantially 360° arc.

0987319.050504

- 0087149-000501
9. The system as claimed in claim 7, wherein the housing comprises:
- (a) a first housing segment comprising a first portion of the irradiation chamber; and
  - (b) a second housing segment comprising a second portion of the irradiation chamber.
- 5
10. The system as claimed in claim 9, wherein the first housing segment is operatively coupled to the second housing segment by a hinge.
11. The system as claimed in claim 9, further comprising a second inlet port adapted to receive radiation from a second source.
- 10 12. The system as claimed in claim 11, wherein the first housing segment comprises at least one emitter port, and wherein the second housing segment comprises at least one emitter port.
13. The system as claimed in claim 1, wherein the transmission means comprises a plurality of optical fibre strands.
- 15 14. The system as claimed in claim 13, wherein each optical fibre strand comprises a first end positioned proximate the inlet port, and a second end positioned proximate an emitter port.
15. The system as claimed in claim 14, wherein the second end of each optical fibre strand is substantially randomly assigned to an emitter port.
- 20 16. The system as claimed in claim 1, wherein the emitter ports are substantially linear in shape.
17. The system as claimed in claim 6, wherein the irradiation chamber is configured to receive a fibre optic bundle.
- 25 18. A system for curing reactive material, the system comprising:
- (a) an inlet port adapted to receive radiation from a source;

- (b) at least one emitter port;
- (c) transmission means operatively coupling the inlet port to each emitter port; and
- (d) wherein the transmission means is adapted to conduct radiation from the inlet port to the emitter ports.
- 5
19. A method for joining a first optical cable having an end to a second optical cable having an end, the method comprising the steps of:
- (a) abutting the end of the first optical cable to the end of the second optical cable;
- 10 (b) applying reactive adhesive to the abutted ends; and
- (c) directing radiation within the absorption spectrum of the reactive adhesive onto the adhesive until the adhesive is sufficiently cured.
20. The method as claimed in claim 19, wherein step (c) comprises positioning the abutted ends within a substantially tubular irradiation chamber of a curing system.
- 15
21. A method for coating fibre optic cabling, the method comprising the steps of:
- (a) coating the external surface of the fibre optic cabling with coating material; and
- 20 (b) directing radiation within the absorption spectrum of the reactive coating material onto the adhesive until the coating material is sufficiently cured.
22. The method as claimed in claim 21, wherein step (b) comprises positioning the coated cabling within a substantially tubular irradiation chamber of a curing system.
- 25

00873409-051501